

AMENDMENTS TO THE CLAIMS

Listing of Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Canceled)
2. (Canceled).
3. (Canceled).
4. (Previously Presented) The method of claim 6, wherein said at least one command is displayed in a modeless fashion in which the user is able to continue to work within the document while said at least one command is displayed.
5. (Currently Amended) The method of claim 6 further comprising after ~~said displaying~~ automatically causing the user interface to contain the context block, executing ~~[[a]] the at least one~~ command without requiring any action from [[a]] the user other than selecting the at least one command.
6. (Currently Amended) A method of exposing commands in a document-centric application program executed by a computer, the method comprising:
storing a tree data structure, the tree data structure stored at the computer, the tree data structure comprising an overall set of nodes, each node in the overall set of nodes being an independent data structure, the overall set of nodes including a root node and a set of child nodes, each node in the set of child nodes being a child of one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in

the set of non-leaf nodes having at least one child node in the overall set of nodes, the root node not being a child of any node in the overall set of nodes, each node in the overall set of nodes associated with a value, each node in the overall set of nodes associated with an expression, the expressions associated with each of node in the set of non-leaf nodes taking as operands the values associated with each child node of the node, the set of leaf nodes including a first leaf node and a second leaf node;

~~determining, at the computer, a user's context within the document-centric application program, wherein the user's context is determined by~~ ascertaining, at the computer, whether a change has occurred to a position of a cursor, the cursor being controlled by [[the]] a user, the cursor being within a document, the document being presented in a user interface, the computer displaying the user interface on a display device, the user interface being generated by provided by the document-centric application program, the document being worked on by the user; and by

ascertaining, at the computer, whether a change has occurred to selected text portions of the document, the selected text portions of the document being portions of the document that have been selected by the user using the cursor; ~~wherein the document is a document in which the user is working; and~~

in response to ascertaining that the change has occurred to the position of the cursor, making, at the computer, a change to the value associated with the first leaf node;

in response to ascertaining that the change has occurred to the selected text portions of the document, making, by the computer, a change to the value associated with the second leaf node;

in response to a change to the value associated with any non-root node, using, at the computer, the expression associated with a parent node to make a determination whether to change a value associated with the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the value associated with the parent node, changing, at the computer, the value associated with the parent node;

in response to determining that the value associated with the root node has changed from a first value to a second value, automatically causing displaying, at the computer, the user

interface to contain a context block, the context block containing at least one command, on a display for the user based on the user's context without the context block not obscuring the document, wherein said at least one command [[is]] selectable by the user to perform an action on the selected text portions of the document; and , wherein said automatically displaying is accomplished, at least in part, using tree based visibility expressions, wherein individual expressions define conditions associated with a user's interaction with the document and which are used to ascertain when to display said at least one command, and wherein individual expressions are represented in a tree data structure having one or more children nodes, said tree structure evaluating to either true or false based at least in part upon the values of said one or more children nodes.

in response to determining that the value associated with the root node has changed from the second value to the first value, automatically causing, at the computer, the user interface not to contain the context block.

7. (Canceled).

8. (Canceled)

9. (Currently Amended) The method of claim 6, wherein said tree data structure context pertains to ~~various~~ a task[[s]] the user ~~[[may]]~~ is attempting to accomplish.

10. (Currently Amended) The method of claim 6,
wherein said set of leaf nodes includes a third leaf node, the value associated with the third leaf node dependent on context further pertains to one or more of the following: a type of the document and a state of the document.

11. (Currently Amended) The method of claim 6, wherein ~~said displaying~~ causing the user interface to contain the content block comprises causing, by the computer, the user interface to contain the context block ~~[[is]]~~ independent of the user selecting any displayed menu item.

12. (Currently Amended) One or more computer-readable storage media having computer-readable instructions thereon which, when executed by a computer, cause the computer to:

store a tree data structure at the computer, the tree data structure comprising an overall set of nodes, each node in the overall set of nodes being an independent data structure, the overall set of nodes including a root node and a set of child nodes, each node in the set of child nodes being a child of one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in the set of non-leaf nodes having at least one child node in the overall set of nodes, the root node not being a child of any node in the overall set of nodes, each node in the overall set of nodes associated with a value, each node in the overall set of nodes associated with an expression, the expressions associated with each of node in the set of non-leaf nodes taking as operands the values associated with each child node of the node, the set of leaf nodes including a first leaf node;

~~determine a user's context within a document-centric application program, wherein said context is determined via a number of activities including~~ ascertain[[ing]] whether a change has occurred to selected text portions of a document, the document being presented in a user interface, the computer displaying the user interface on a display device, the user interface being generated by a document-centric application program operating on the computer, the selected text portions of the document being portions of the document that have been selected using a cursor, the cursor being controlled by [[the]] a user, wherein the document [[is]] being a document in which the user is working;

in response to ascertaining that the change has occurred to the selected text portions of the document, make a change to the value associated with the first leaf node;

in response to a change to the value associated with any non-root node, use the expression associated with a parent node to make a determination whether to change a value associated with the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the value associated with the parent node, change the value associated with the parent node;

in response to determining that the value associated with the root node has changed from a first value to a second value, automatically cause the user interface to contain a context block,
~~the context block containing display, independent of the user selecting any displayed menu item,~~
at least one command, the context block not on a display for the user based on the user's context
~~without obscuring the document, said at least one command being displayed in a modeless fashion in which the user is able to continue to work within the document provided by the application program while said at least one command is displayed, and wherein said at least one command is selectable by the user to perform an action on the selected text portions of the document; and~~

in response to determining that the value associated with the root node has changed from the second value to the first value, automatically cause the user interface not to contain the context block,
~~remove said at least one command from the user's display responsive to a change in the user's context,~~

~~wherein said automatically display and automatically remove are accomplished, at least in part, using tree based visibility expressions, wherein individual expressions define conditions associated with the user's interaction with the document centric application program and are used to ascertain when to display said at least one command, and wherein individual expressions are represented in a tree data structure which evaluates to either true or false based upon the value of one or more children nodes in the tree data structure.~~

13. (Currently Amended) The computer-readable storage media of claim 12,

wherein the set of leaf nodes includes a second leaf node; and

wherein the instructions further cause the computer to:

ascertain whether a change has occurred to a position of the cursor; and

in response to making ascertaining that the change has occurred to the position of the cursor, making a change to the value associated with the second leaf node.

~~wherein the computer determines the user's context by ascertaining a position of the user's cursor within the document provided by the application program.~~

14.-35. (Canceled)

36. (Currently Amended) A method of exposing commands in a document-centric software application program executed by a computer, the method comprising:

storing a tree data structure at the computer, the tree data structure comprising an overall set of nodes, each node in the overall set of nodes being an independent data structure, the overall set of nodes including a root node and a set of child nodes, each node in the set of child nodes being a child of one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in the set of non-leaf nodes having at least one child node in the overall set of nodes, the root node not being a child of any node in the overall set of nodes, each node in the overall set of nodes associated with a value, each node in the overall set of nodes associated with an expression, the expressions associated with each of node in the set of non-leaf nodes taking as operands the values associated with each child node of the node, the set of leaf nodes including a first leaf node;

ascertaining, at the computer, whether a change has occurred to selected text portions of a document, the document being presented in a user interface, the computer displaying the user interface on a display device, the user interface being generated by determining, at the computer, a user's context within the document-centric application program, the selected text portions of the document being portions of the wherein the user's context includes text portions of a document that have been selected using a cursor, the cursor controlled by [[the]] a user, wherein the document is a document in which the user is working; ~~wherein said determining is performed by evaluating at least portions of one or more expressions, each expression being associated with a context block and defining a condition that describes one or more aspects of an interaction of the user with the document-centric application program, wherein individual~~

~~expressions comprise tree based visibility expressions, and wherein individual tree based visibility expressions are boolean expressions represented in a tree data structure; and~~

in response to ascertaining that the change has occurred to the selected text portions of the document, making, at the computer, a change to the value associated with the first leaf node;

in response to a change to the value associated with any non-root node, using, at the computer, the expression associated with a parent node to make a determination whether to change a value associated with the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the value associated with the parent node, changing, at the computer, the value associated with the parent node;

in response to determining that the value associated with the root node has changed from a first value to a second value, automatically causing displaying, at the computer, the user interface to contain a context block, the computer causing the user interface to contain the context block independent of the user selecting any displayed menu item, the context block not at least one context block on a display for the user based on the user's context without obscuring the document, individual the context block[[s]] containing multiple commands, each command in the context block being selectable by the user, that are possible selections for the user based upon their context, wherein at least one command in the context block being [[is]] selectable by the user to perform an action on the selected text portions of the document;

in response to determining that the value associated with the root node has changed from the second value to the first value, automatically causing, at the computer, the user interface not to contain the context block.

37. (Currently Amended) The method of claim 36, wherein ~~the expressions evaluate to each~~ value associated with each node in the overall set of nodes is a Boolean value[[s]].

38. (Currently Amended) The method of claim 36, wherein the set of leaf nodes includes a second leaf node, the value associated with the second leaf node being based on user's context is affected by one or more of the following: a

~~document~~ type of the document, a ~~document~~ state of the document, and objects within the document that are selectable by the user.

39. (Currently Amended) The method of claim 36, wherein ~~[[said]]~~ automatically causing the user interface to contain the context block displaying comprises ~~causing the displaying~~ a context block ~~having to contain~~ a title bar area, the title bar area labeling ~~that labels~~ the context block.

40. (Original) The method of claim 39, wherein the title bar area is configured to enable the context block to be toggled between expanded and collapsed states.

41. (Currently Amended) The method of claim 39, wherein the title bar area comprises a menu display button, the menu display button being ~~that is~~ configured to enable a menu, the menu ~~that is~~ associated with the context block, ~~to be displayed~~.

42. (Currently Amended) The method of claim 41, wherein the menu ~~display button is~~ ~~associated with a menu that~~ contains links to one or more context panes, each of the context panes comprising additional context-sensitive commands, each of the context panes being modeless.

43. (Currently Amended) The method of claim 36, wherein ~~said displaying comprises displaying a~~ the context block ~~[[with]]~~ includes a controls area that exposes the multiple commands to the user.

44. (Currently Amended) The method of claim 43, wherein a command display within the controls area is defined in Hypertext Markup Language (HTML).

45. (Currently Amended) The method of claim 36, wherein automatically causing the user interface to contain the context block ~~said displaying~~ comprises displaying said ~~at least one~~ context block in a modeless fashion.

46. (Currently Amended) A method of exposing commands in a document-centric application program executed by a computer, the method comprising:

storing a tree data structure at the computer, the tree data structure comprising an overall set of nodes, each node in the overall set of nodes being an independent data structure, the overall set of nodes including a root node and a set of child nodes, each node in the set of child nodes being a child of one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in the set of non-leaf nodes having at least one child node in the overall set of nodes, the root node not being a child of any node in the overall set of nodes, each node in the overall set of nodes associated with a value, each node in the overall set of nodes associated with an expression, the expressions associated with each of node in the set of non-leaf nodes taking as operands the values associated with each child node of the node, the set of leaf nodes including a first leaf node;

automatically ascertaining, at the computer, whether a change has occurred to a position of a cursor within a document, the document being presented in a user interface, the computer displaying the user interface on a display device, the user interface being generated by
~~determining, at the computer, a user's context within the document-centric application program, without requiring the user to make a menu selection, wherein said context includes text portions of a document that have been selected using a cursor~~ the cursor being controlled by [[the]] a user,
~~where the document is a document the user is working in; wherein said determining is accomplished, at least in part, using tree based visibility expressions, wherein the individual tree based visibility expressions define conditions that describe interactions of the user with said document-centric application program, and wherein individual tree based visibility expressions are represented in a tree data structure having one or more children nodes, said tree structure evaluating to either true or false based at least in part upon the values of said one or more children nodes;~~

in response to ascertaining that the change has occurred to the position of the cursor, making, at the computer, a change to the value associated with the first leaf node;

in response to a change to the value associated with any non-root node, using, at the computer, a expression associated with a parent node to make a determination whether to change a value associated with the parent node, the expression associated with the parent node taking as operands the values associated with each child node of the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the value associated with the parent node, changing, at the computer, the value associated with the parent node;

in response to determining that the value associated with the root node has changed from a first value to a second value, automatically causing, based on the user's context, displaying, at the computer, the user interface to contain a set of on a display, commands, each command in the set of commands being that are associated with the context and that are able to assist the user in accomplishing a task, wherein the set of commands [[do]] not obscure obscuring the document; [[and]]

in response to determining that the value associated with the root node has changed from the second value to the first value, automatically causing, at the computer, the user interface not to contain the set of commands; and

while the user interface contains the set of commands, commands are being displayed, enabling, with the computer, the user to select and apply various commands in the set of commands to the document-selected text portions multiple times.

47. (Currently Amended) The method of claim 46 further comprising applying, by the computer, one or more selected commands when selected by the user, without further user interaction, the selected commands being in the set of commands.

48. (Currently Amended) The method of claim 46, wherein causing the user interface to contain the set of commands said displaying comprises causing, at the computer, the user interface to display displaying the set of commands responsive to the user selecting a menu item, the menu item being in [[from]] a menu, the menu that is supported by an automatically-

~~appearing and disappearing a context block, the context block containing the set of commands, that contains context sensitive commands.~~

49. (Currently Amended) The method of claim 46, wherein causing the user interface to contain the set of commands ~~said displaying~~ comprises displaying, by the computer, the set of commands in a modeless manner.

50. (Currently Amended) The method of claim 46, wherein causing the user interface to contain the set of commands ~~said displaying~~ comprises displaying, by the computer, the set of commands within a context pane, the context pane having a title bar and a controls area, the title bar labeling that labels the context pane, [[and a]] the controls area that exposes including the set of commands, to the user.

51. (Original) The method of claim 50, wherein the context pane is not collapsible.

52. (Original) The method of claim 50, wherein the context pane must be closed by the user.

53. (Original) The method of claim 50, wherein the user must request the context pane to be displayed.

54. (Currently Amended) The method of claim 50, wherein some ~~of the~~ commands in the set of commands ~~controls area are context sensitive and are disabled, if they are out of context.~~

55. (Currently Amended) The method of claim 50, wherein the context pane includes a context-sensitive help feature, the context-sensitive help feature displaying that displays help information, the help information that is contextually related to the context pane.

56. (Currently Amended) The method of claim 55, wherein the context-sensitive help feature is accessible via an icon on the title bar.

57. (Currently Amended) The method of claim 55, wherein the context-sensitive help feature is displayed in a modeless manner.

58. (Original) The method of claim 50, wherein multiple context panes are stackable in a queue.

59. (Currently Amended) One or more computer-readable storage media having computer-readable instructions thereon which, when executed by a computer, cause the computer to perform the method of claim 46.

60.-68. (Cancelled).

69. (Currently Amended) An electronic computing system comprising:

one or more processing units;

a display device; and

a system memory storing:

storing a tree data structure, the tree data structure comprising an overall set of nodes, each node in the overall set of nodes being an independent data structure, the overall set of nodes including a root node and a set of child nodes, each node in the set of child nodes being a child of one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in the set of non-leaf nodes having at least one child node in the overall set of nodes, the root node not being a child of any node in the overall set of nodes, each node in the overall set of nodes being associated with a Boolean value, each node in the overall set of nodes being associated with a Boolean expression, the Boolean expression associated with each of node in the set of non-leaf nodes taking as operands the Boolean values associated with

each child node of the node, the set of leaf nodes including a first leaf node, a second leaf node and a third leaf node; and

a single document-centric application program, the single document-centric application program being configured to: provide:

cause the display device to display a single navigable window, the single navigable window containing that contains a document that a user is working in;

provide a plurality of functionalities, the user being able to navigate to which the single navigable window to each functionality in the plurality of functionalities; can be navigated by the user; and

cause the single navigable window to contain at least one context-sensitive command area, that is associated with the single navigable window and that does the context-sensitive command area not obscure obscuring the document,

ascertain whether a change has occurred to a position of a cursor, the cursor being controlled by the user, the cursor being within the document;

ascertain whether a change has occurred to selected text portions of the document, the selected text portions of the document being portions of the document selected by the user using the cursor;

in response to ascertaining that the change has occurred to the position of the cursor, make a change to the Boolean value associated with the first leaf node;

in response to ascertaining that the change has occurred to the selected text portions of the document, make a change to the Boolean value associated with the second leaf node;

change the Boolean value associated with the third leaf node when the user changes between functionalities in the plurality of functionalities;

in response to a change to the Boolean value associated with any non-root node, use the Boolean expression associated with a parent node to make a determination whether to change a Boolean value associated with the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the Boolean value associated with the parent node, change the Boolean value associated with the parent node;

in response to determining that the Boolean value associated with the root node has changed from a first value to a second value, automatically cause the context-sensitive command area to contain a context block, the context block containing at least one command, said at least one command being selectable by the user to perform an action on the selected text portions of the document; and

in response to determining that the Boolean value associated with the root node has changed from the second value to the first value, automatically cause the context-sensitive command area not to contain the context block.

~~the single document-centric application program being configured to automatically change command sets that are presented to the user within the command area as the user navigates to different ones of the functionalities, at least some commands of the command sets being displayable independent of the user selecting any displayed menu item and as a function of one or more tree-based visibility expressions that define conditions that describe interactions of the user with the single document-centric application program,~~

~~wherein individual tree-based visibility expressions are boolean expressions represented in a tree data structure,~~

~~wherein said interactions include text portions of the document that have been selected using a cursor controlled by the user, and~~

~~wherein at least one command is selectable by the user to perform an action on the selected text portions of the document.~~

70. (Currently Amended) The computing system of claim 69, wherein the single document-centric application program is configured to provide cause the single navigable window to contain navigation instrumentalities, ~~associated with the single navigable window, the~~

navigation instrumentalities being configured for use by the user to navigate the single navigable window to ~~[[the]]~~ different functionalities in the plurality of functionalities.

71. (Currently Amended) The computing system of claim 70, wherein one of the navigation instrumentalities comprises links, each of the links being associated with a functionality in the plurality of each of the multiple different functionalities.

72. (Currently Amended) The computing system of claim 70, wherein one of the navigation instrumentalities comprises browser-like navigation buttons, the browser-like navigation buttons being that are usable, in connection with the navigation model, by the user to navigate the single navigable window between [[the]] different functionalities in the plurality of functionalities.

73. (Currently Amended) The computing system of claim 69, wherein each functionality in the plurality of the multiple different functionalities comprises document-centric functionalities.

74. (Currently Amended) An electronic computing system comprising:

a processing unit; ~~[[and]]~~

a display device; and

a system memory storing:

a tree data structure, the tree data structure comprising an overall set of nodes, each node in the overall set of nodes being an independent data structure, the overall set of nodes including a root node and a set of child nodes, each node in the set of child nodes being a child of one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in the set of non-leaf nodes having at least one child node in the overall set of nodes, the root node not being a child of any node in the overall set of nodes, each node in the overall set of nodes being associated with a value, each node in the overall set of nodes being associated with an expression, the expressions associated with each of node in the set of non-leaf nodes

taking as operands the values associated with each child node of the node, the set of leaf nodes including a first leaf node;

a single document-centric application program ~~embodied on a computer-readable medium~~, the single document-centric application, when executed at the processing unit, cause the processing unit to:

display, on ~~[[a]]~~ the display device, a single navigable window, ~~[[for]]~~ a user being able to use the single navigable window in navigating between multiple different functionalities provided by the single document-centric application program;

display a document in the single navigable window;

display ~~provide~~ at least one context-sensitive command area ~~that is associated with in~~ the single navigable window, the context-sensitive command area not obscuring and that does not obscure ~~[[a]]~~ the document; ~~presented in the navigable window, the single document-centric application program automatically changing command sets that are presented to the user within the command area as the user navigates to different functionalities, at least some commands of the command sets being displayable independent of the user selecting any displayed menu item and as a function of one or more tree-based visibility expressions that define conditions that describe interactions of the user with the single document-centric application program;~~

ascertain whether a change has occurred to selected text portions of the document, the selected text portions of the document being portions of the document selected using a cursor, the cursor being controlled by the user,

in response to ascertaining that the change has occurred to the selected text portions of the document, make a change to the value associated with the first leaf node;

in response to a change to the value associated with any non-root node, use the expression associated with a parent node to make a determination whether

to change a value associated with the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the value associated with the parent node, change the value associated with the parent node;

in response to determining that the value associated with the root node has changed from a first value to a second value, automatically cause the context-sensitive command area to contain a context block, the context block containing at least one command, said at least one command is selectable by the user to perform an action on the selected text portions of the document; and

in response to determining that the value associated with the root node has changed from the second value to the first value, automatically cause the context-sensitive command area not to contain said at least one command.

~~wherein the individual tree-based visibility expressions are boolean expressions represented in a tree data structure,~~

~~wherein said interactions include text portions of the document selected using a cursor controlled by the user, and~~

~~wherein at least one command is selectable by the user to perform an action on the selected text portions of the document; and~~

~~incorporate different functionalities in an extensible manner so that the user is able to use the single navigable window to navigate to the different incorporated functionalities.~~

75. (Currently Amended) The computing system of claim 74, wherein the single document-centric application program is configured to cause the processing unit to provide navigation instrumentalities associated with the single navigable window, the navigation instrumentalities being configured for use by the user to navigate the single navigable window to the different functionalities.

76. (Original) The computing system of claim 75, wherein one of the navigation instrumentalities comprises links associated with each of the multiple different functionalities to which the single navigable window can be navigated.

77. (Currently Amended) The computing system of claim 75, wherein one of the navigation instrumentalities comprises browser-like navigation buttons that can be used to navigate the single navigable window between the different functionalities.

78. (Currently Amended) A computing method comprising:
storing a tree data structure, the tree data structure being stored at a computer, the tree data structure comprising an overall set of nodes, each node in the overall set of nodes being an independent data structure, the overall set of nodes including a root node and a set of child nodes, each node in the set of child nodes being a child of one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in the set of non-leaf nodes having at least one child node in the overall set of nodes, the root node not being a child of any node in the overall set of nodes, each node in the overall set of nodes being associated with a Boolean value, each node in the overall set of nodes being associated with a Boolean expression, the Boolean expressions associated with each of node in the set of non-leaf nodes taking as operands the Boolean values associated with each child node of the node, the set of leaf nodes including a first leaf node and a second leaf node;

displaying, on a display device, a user interface, the user interface comprising that ~~comprises~~ a single navigable window ~~that is~~ capable of being navigated between multiple different functionalities ~~that are~~ provided by a single document-centric application program;

receiving, at ~~[[a]]~~ the computer, user input that indicates selection of a particular one of the functionalities;

responsive to receiving said user input, navigating, at the computer, the single navigable window to the particular one of the functionalities selected functionality and displaying in said single navigable window indicia of said particular one of the functionalities, functionality that

~~enables said particular one of the functionalities enabling a user to accomplish a task associated with the particular one of the functionalities; selected functionality;~~

in response to receiving said user input, changing, at the computer, the Boolean value associated with the first leaf node;

ascertaining, at the computer, whether a change has occurred to selected text portions of a document, the selected text portions of the document being portions of the document selected by the user using a cursor;

in response to ascertaining that the change has occurred to the selected text portions of the document, making, at the computer, a change to the Boolean value associated with the second leaf node;

in response to a change to the Boolean value associated with any non-root node, using, at the computer, the expression associated with a parent node to make a determination whether to change the Boolean value associated with the parent node, the non-root node being in the set of child nodes, the parent node being a parent of the non-root node;

in response to making a determination to change the Boolean value associated with the parent node, changing, at the computer, the value associated with the parent node;

~~determining, at the computer, a context of the user within the selected functionality, wherein said context includes a number of activities including whether one or more text portions of a document have been selected using a cursor controlled by the user, where the document is a document the user is working in, wherein said determining is performed by using one or more tree based visibility expressions, wherein individual tree based expressions define conditions associated with interaction of the user with said selected functionality, and wherein the individual tree based visibility expressions are boolean expressions represented in a tree data structure; and~~

in response to determining that the Boolean value associated with the root node has changed from a first value to a second value, automatically displaying, [[at]] by the computer on the display device, a context block, the context block not without obscuring the document, at least one command for the user based on the user's context the computer displaying the context block independent of the user selecting any displayed menu item, wherein said context block

containing at least one command [[is]] selectable by the user to perform an action on the one or more selected text portions of the document; and[[.]]

in response to determining that the value associated with the root node has changed from the second value to the first value, automatically causing, by the computer, the user interface not to contain the context block.

79. (Canceled).

80. (Currently Amended) A method of exposing commands in a document-centric application program, the method comprising:

~~determining, at the computer, a user's context within the document-centric application program by ascertaining a selection by the user within a document provided by the document-centric application program, wherein said selection comprises a plurality of selection activities including text portions of the document that have been selected using a cursor controlled by the user, said determining further being performed by using one or more tree-based visibility expressions, wherein individual expressions define conditions associated with interaction of the user with said document, and wherein individual tree-based visibility expressions are represented in a tree data structure which evaluates to either true or false based upon the value of one or more children nodes in the tree data structure; and~~

storing, at a system memory, a table containing a plurality of entries, each entry in the plurality of entries specifying a context block in a plurality of context blocks and a visibility expression in a plurality of visibility expressions, each visibility expression in the plurality of visibility expressions represented as a tree data structure in a plurality of tree data structures, each tree data structure in the plurality of tree data structures comprising an overall set of nodes, each node in the overall set of nodes being an independent data structure, the overall set of nodes including a root node and a set of child nodes, each node in the set of child nodes being a child of one other node in the overall set of nodes, the overall set of nodes comprising a set of leaf nodes and a set of non-leaf nodes, no node in the overall set of nodes being a child of any node in the set of leaf nodes, each node in the set of non-leaf nodes having at least one child node in the

overall set of nodes, the root node not being a child of any node in the overall set of nodes, each node in the overall set of nodes associated with a Boolean value, each node in the overall set of nodes associated with a Boolean expression, the Boolean expressions associated with each of node in the set of non-leaf nodes taking as operands the Boolean values associated with each child node of the node,

wherein at least one tree data structure in the plurality of tree data structures includes a leaf node associated with a Boolean expression dependent on a position of a cursor controlled by a user of a computer;

display, by the computer, a single navigable window containing a document area and a command area, the document area containing a document in which the user is working;

evaluating, at the computer, each tree data structure in the plurality of tree data structures by repeatedly:

selecting, at the computer, a current tree data structure in the plurality of tree data structures; and

after selecting the current tree data structure, evaluating, at the computer, each leaf node in the set of leaf nodes of the current tree data structure, evaluating one of the leaf nodes of the current tree data structure comprising:

selecting, at the computer, an unevaluated leaf node in the set of leaf nodes of the current tree data structure as a current node;

after selecting the unevaluated leaf node as the current node, evaluating, at the computer, the Boolean expression associated with the current node;

after evaluating the Boolean expression associated with the current node, determining, at the computer, whether the Boolean value associated with the current node has changed;

(a) in response to determining that the Boolean value associated with the current node has changed, determining, at the computer, whether the current node is the root node of the current tree data structure;

(b) in response to determining that the current node is not the root node of the current tree data structure, setting, at the computer, a parent of the current node as the current node;

(c) after setting the parent of the current node as the current node, evaluating, at the computer, the Boolean expression associated with the current node;

(d) after evaluating the Boolean expression associated with the current node, determining, at the computer, whether the Boolean value associated with the current node has changed;

(e) in response to determining that the Boolean value associated with the current node has not changed, completing, at the computer, evaluation of the unevaluated leaf node;

(f) in response to determining that the Boolean value associated with the current node has changed, performing, at the computer, steps (a)-(f) again;

in response to determining that the current node is the root node of the current tree data structure, determining, at the computer, whether the Boolean value associated with the current node is a first Boolean value;

in response to determining that the Boolean value associated with the current node is the first Boolean value, automatically displaying [[at]] by the computer on a display device at least one command on a display for the user based on the user's context without obscuring the document, a context block in the command area, the table containing an entry specifying the context block and the visibility expression represented by the current tree data structure, the context block containing wherein said at least one command [[is]] selectable by the user to perform an action on the selected text portions of the document; and

in response to determining that the Boolean value associated with the current node is not the first Boolean value, hiding, by the computer, the context block associated with the current tree data structure from the command area.

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81.-95. (Canceled).